

Gasket section

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FOREDECK HATCH TURN DOGS

Use an awl to mark a center in the epoxy filled holes. These marks should be about 1/2" from the edge of the hatch cut-out.



Drill the holes for the screws as square as possible to the surface of the foredeck and use a countersink to lightly bevel the edges of the holes.

Install all the screws & turn dogs. Make sure the screws are square to the surface when starting them. Remove the screws and apply a tiny bit of epoxy to the insides of the holes with a nail or the butt end of a tiny drill bit.

Install the screws and turn dogs. Tighten the screws and then loosen until the dogs turn with friction. They will loosen up a bit with use and it's best if they turn with a bit of friction after some use.

GASKETS

The PT 11 has 3 gaskets. All of them quite important to the safe operation of the boat. The hull gasket keeps the hull from leaking, the hatch gasket keeps the storage area watertight, and the trunk cap gasket keeps the trunk from gushing water when towing and getting your butt wet when rowing.

We have tried many different gasket materials and only one, latex surgical tubing, has provided the performance needed. Why? Because it has perfect memory: It can be squashed flat and it still pops back to its original shape. What's wrong with surgical tubing? It's challenging to adhere to, and causing issues with gaskets coming loose in some PT 11's. After trying many different adhesives, were back to using contact cement (used for gluing the leathers too), but now we're using a different method and getting much better adhesion. Another issue we have had is that the gaskets can break down and adhere to the opposite surface when left pressed too long, especially true with the trunk cap, where the gasket pressure is highest. If the cap is left dogged down for a long period, removing the cap can pull the gasket out of the notch. This is why we now show prepping only one face of the gasket.

Gluing in the gaskets is a tricky and fiddly job. You'll need a fresh 3-M scrubbie, a new syringe, a white-out pen, and new single-edge razor blades.

Mark your 5/32" drill bit to the correct depth for the 5/8" #10 screws.



All 3 gasket notches should be prepped for gluing with multiple narrow strips of scrubbie. Cut the strips with a sharp knife and straightedge. **Push the scrubbie around with the end of a stick as shown to remove gloss from the bottom faces of the notches (upper left photos).** Thoroughly wipe all the dust from the notches with clean cotton rags.

The gaskets should be prepped on one side only with a scrubbie pad (photo on right).

Nail one end of the gaskets to a clean bench as shown and stretch them out tightly without twisting them and nail the opposite ends to the bench.

Press the gaskets to the bench with one hand to keep them from rolling while scrubbing with the other hand as shown. Scrub right up to the nails at either end.



Prepping one side only will allow the cement to bond, leaving the upper faces of the gaskets scratch-free for longevity.

Use the white-out pen to make little dots of white on the prepped surfaces.

Shake the pen hard, press and squeeze on a scrap of plywood frequently to help the pen make dots every couple of inches.

Pull the nails and cut about 1/2" from both ends of each gasket (photo on right).

The gasket ends should be cut square. Hold the blade square to the gasket and square to the surface and just push down hard. See note. →

Wipe the gaskets with clean cotton and place on a clean surface



Use a fingertip either side of the blade to hold the gasket.



The foredeck hatch gasket is the hardest one, so let's start there. Wipe the foredeck and notch clean. Tape one end of the 45" long gasket on center as shown with the prepped face down. **Without stretching the gasket, slowly work around the opening. Keep the white dots facing down and the gasket centered in the notch.**

The tape should be kept inside foredeck edges as shown as the hatch lid will be used for pressure.



Mark the gasket for cutting about 1/16" over length.



Cut the end off square using a thin scrap of wood to cut on and following inst. on previous page.



Rub the tape down firmly to the gasket as it will stay attached and help keep the upper face facing up when gluing.

Carefully lift the aft edge, picking up the tape edges with a chisel stick when needed. **Pinch the gasket and tape as shown below to keep the tape attached to the upper face of the gasket**



Expose more than half of the gasket notch as shown below.

This area should be glued and allowed to cure before gluing the forward part.





Stir the contact cement and suck up about half a syringe full with a new syringe. Stand the syringe on its tail to push out air bubbles.

The photo on the right shows about how much contact cement is needed. The application can and will be lumpy and messy looking, but no one will ever see it. **Note** how syringe

is leaned over so that the edge of the notch is centering the bead.

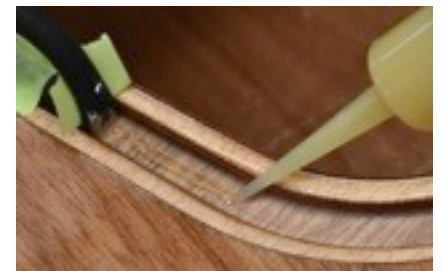
Because the cement will start to “skin over” (dry), fast, it’s best to quickly apply cement to about half of the exposed notch and place the gasket to that area. **Don’t stretch the gasket and try to center the gasket in the notch.**

Apply cement to the remaining exposed notch and place the gasket. Use more tabs of tape to center the gasket (pull and replace tape where needed). **As soon as possible, put the lid in place and dog it down to hold the gasket down.**



Tightly tape over the tip of the syringe and push the air out to make it last. **The remaining gasket can be glued much later the same day, or the following day.**

Expose one end of the remaining notch and apply cement up to glued area (both photos below). Apply that end of the gasket and tape down.



The remaining end of the gasket can either be stretched or compressed to make the butt joint fit with just a bit of compression.



Apply cement to the remaining notch, tape down most of the gasket and then syringe just a bit of cement to the tip of one end as shown.

Align the butt flush, place tape over the butt and dog the lid down again.



The trunk cap gasket is much easier. Tape the gasket in place with the white dots facing down. Carefully cut the butt joint about 1/16" over length and compress into place.



Carefully pull up the side of the gasket without the butt joint.



Apply cement to the exposed notch, **tape the gasket back in place (as above),** and **dog it down over the trunk.**



Each end can be lifted, glued, and taped back down. Remember to place a piece of tape over the glued butt joint before dogging the cap back down.



When the contact cement has cured and tape removed, the tight corners (trunk cap) can have a bit more cement syringed in under the gasket if it seems necessary, but dog the cap down while the cement is curing.

The hull gasket can be done the same day, but the bow section will need to be standing on it's nose.

We tied it to the edge of the bench with the rope running through the alignment holes (see photos next page).

The stern section will be needed for clamping pressure. Assembly can be done by one person on the table with the aid of some blocks.



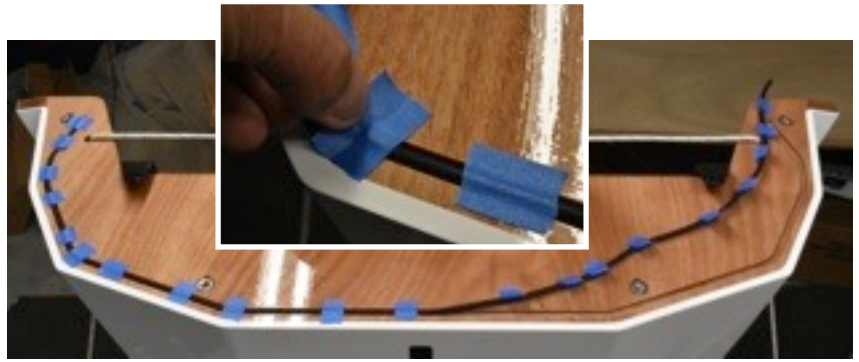
There's no butt joint in the hull gasket, but it sure is long!

The ends of the gasket should stop about 1/4" from the end of the notch.

Tape the whole gasket in place (you know the drill), but this time lift one end, apply cement, and then lift the other end and repeat.

Pinch the tape when pulling up the gasket (inset) and **apply cement to only about half of the exposed notch before applying the gasket.**

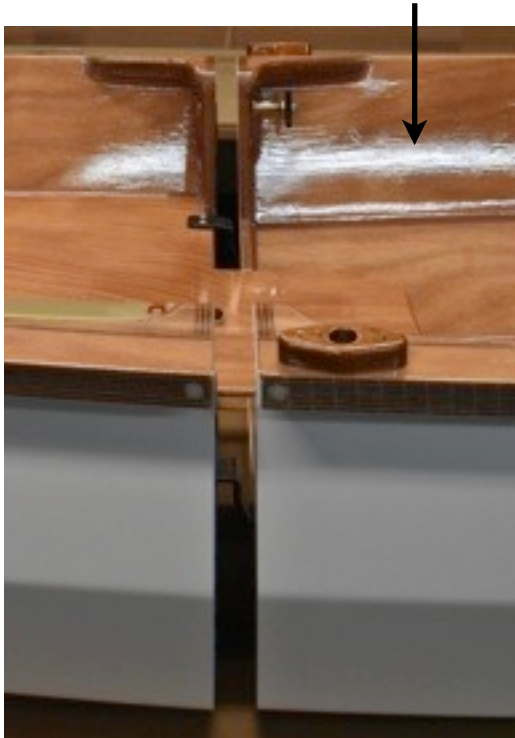
We rubbed the gasket down with fingertips to squish it into the cement and then centered it in the notch with tape.



When assembling the hull, the gasket can "roll" out of the notch in the lower corners because one surface is sliding against the other and the gasket is grabby. We used a little extra cement in the lower corners and taped the hell out of it so it wouldn't move when assembling the hull for clamping pressure, which should be done right away.



With both hull-halves close, prop up both ends with roughly 1" thick blocks, so there's a bigger gap at the bottom than the top before lifting the seat tongue and assembling the hull tightly.



GASKET MAINTENANCE

It appears that waxing the mating face (not the gasket) is effective in keeping the gasket from bonding to the opposite surface when left under pressure for a long time. It should also help with the hull gasket being "grabby". Any paste wax should work to wax just the needed area.

If a gasket starts to lift, fix it! Flush with water, dry thoroughly, inject a little cement, and clamp the lid down.

Replacing gaskets: To get the glue residue out, level the area and pour acetone into the notch. Pinch a paper cut to apply acetone into the notch only. Soak and scrub with tiny bits of rag pushed around with a stick. Don't get acetone on the turn-dogs.

You can buy the surgical tubing from McMaster Carr, part number 5234K963 5/32 ID 1/4" OD

Please give us your feedback and ideas about gaskets, gluing the gaskets, and gasket maintenance.